

**REBUTTAL TESTIMONY OF**

**ANDREW M. DURKEE**

**ON BEHALF OF**

**DOMINION ENERGY SOUTH CAROLINA, INC.**

**DOCKET NO. 2023-9-E**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.**

A. My name is Drew Durkee and my business address is 1902 Reston Metro Plaza, Reston, VA 20190. I am a Director with ICF Resources, LLC. ("ICF") and am testifying on behalf of Dominion Energy South Carolina, Inc. ("DESC" or the "Company").

**Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?**

A. I have.

**Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

A. The purpose of my rebuttal testimony is to describe why certain assertions and recommendations of Witness Jim Grevatt on behalf of the South Carolina Coastal Conservation League, Southern Alliance for Clean Energy ("CCL/SACE"), and Sierra Club are inappropriate and should be rejected. Specifically, my rebuttal testimony will address the following recommendations and observations of this Witness:

- 1 • That the Achievable Potential presented in the DSM Potential Study  
2 is unrealistically low and the Medium Case maintains the status quo
- 3 • The Achievable Potential is “principally” based on current DESC  
4 performance and spending in the latest evaluated program year
- 5 • The Commission Required Scenarios were developed “without  
6 providing opportunity for EE Advisory Group participants to provide  
7 input to the process”
- 8 • Witness Grevatt’s statement that “There is little evidence that DESC  
9 and ICF recognize the load mitigating benefits of energy efficiency  
10 and the potential for its deployment to provide cost-effective benefits  
11 for its customers. As a result, it is my view that DESC has failed to  
12 fairly evaluate a high DSM case in its 2023 IRP”
- 13 • That ICF based the maximum achievable and achievable potential  
14 solely on “ICF program data and expert judgement” and “historical  
15 program savings and cost data”
- 16 • That DESC did not take the Commission’s directive to evaluate higher  
17 EE savings levels seriously and that “from the outset ICF and DESC  
18 viewed the savings levels in the Commission’s order as only a  
19 hypothetical exercise. As such, the Company has not made an earnest  
20 effort to determine how to achieve higher savings levels”
- 21 • That ICF and DESC did not consider that other utility EE programs  
22 have achieved higher levels of savings
- 23 • That ICF “chose an overly simplistic approach that failed to consider  
24 higher cost-effective levels of savings” in the Commission required  
25 scenarios
- 26 • That “DESC’s preconception, rather than actual evidence, appears to  
27 be driving the conclusion that the higher levels of savings in the  
28 Commission’s 2020 directive are unrealistic
- 29 • That DESC has a “flawed conclusion” that the higher level of savings  
30 shown in the Commission required scenarios are out of hand because  
31 they are higher than what was identified as realistically achievable
- 32 • That it is “not clear” why the Company modeled the two components  
33 of Home Energy Check-up separately and together
- 34 • That the Company arbitrarily limited the measures in its analysis

- 1 • That the Pathways for Energy Efficiency in Virginia (VA Pathways),  
2 of which Witness Grevatt is a primary author, is appropriate to use as  
3 justification for the Commission to order higher level of savings
- 4 • Witness Grevatt's implication that changes were made to the measure  
5 characterization that were intended to be hidden from the stakeholder  
6 group
- 7 • Witness Grevatt's implication that using data other than the most  
8 recent and evaluated for measure characterization would be  
9 appropriate
- 10 • That "ICF's assumptions about program costs and achievable levels  
11 of savings are flawed, overly conservative, and not responsive to the  
12 Commission's directive
- 13 • That simply using program savings levels from the Commission  
14 required scenarios that are estimated to be cost-effective is the best  
15 method for determining savings goals for DESC
- 16 • That simply performing the cost-effectiveness analysis of the higher  
17 scenarios and providing results with a positive cost-effective score "in  
18 and of itself suggests that they are achievable"
- 19 • That it is unclear why the Company would use costs for cost-  
20 effectiveness testing in the Commission Required scenarios if the  
21 Company did "not feel they are sufficient to achieve the higher level  
22 of savings"
- 23 • That IRA funding should be accounted for within this Potential Study  
24 even though there is very little information how that money will be  
25 spent in DESC's territory and how attribution will be designated for  
26 the savings those funds may achieve
- 27 • Witness Grevatt's assertion that the "determination of the achievable  
28 level of savings in the MPS primarily relied on 'ICF program data and  
29 expert judgement' and 'historical program savings (evaluation) and  
30 cost data'."
- 31 • That the DOE's Energy Efficiency Potential Studies Catalog  
32 referenced by Witness Grevatt provides justification for higher  
33 savings goals to be ordered by the Commission than what was found  
34 in the Potential Study

- That Witness Grevatt's recommendations for required savings levels are appropriate

I would like to note that while some of the discussion topics may seem out of order, I have done my best to address them in the order in which they appear in Witness Grevatt's testimony so that one could perform a direct comparison.

**Q. WITNESS GREVATT ASSERTS THAT THE ACHIEVABLE POTENTIAL PRESENTED IN THE DSM POTENTIAL STUDY IS UNREALISTICALLY LOW AND THE MEDIUM CASE MAINTAINS THE STATUS QUO. DO YOU AGREE?**

A. No. In fact, the Medium Case demonstrates significantly higher savings than what has been achieved by DESC historically. Specifically it shows a 22% increase over Program Year 9 (i.e., the last full year that was not affected by the pandemic), which is equivalent to 11,689 Annual MWh. Further, a list of expansions and modifications to the programs was provided previously in Table 6 of the DSM Potential Study and is provided again below.

Program	Key Differences from Existing Programs to Medium Case
Appliance Recycling	Increased participation, increased implementation fees to reflect market prices, updated NTG ratio
Heating, Cooling, and Water Heating	Increased participation for HPWH and ASHP measures, removed measures that were not cost-effective (e.g., AC rebates)

Program	Key Differences from Existing Programs to Medium Case
Home Energy Checkup – Tier 1	Increased participation and direct installation of non-lighting measures, phase out installation of direct install LEDs after 2027
Home Energy Checkup – Tier 2	Considered program component separately
Home Energy Report	Opt-out program, aligned savings based on EM&V recommendations
Multifamily	Increased participation, phases out installation of direct install screw-base LEDs after 2027
Neighborhood Energy Efficiency Program	Adjusted participation to achievable levels vs rapid assessment, increased implementation expenses to reflect market prices and increases cost of measures, phase out installation of direct install LEDs after 2027
Online Marketplace	Increased smart thermostats and other non-lighting measures, phased out sale of LEDs after mid-2023, implementation expenses increased to reflect market prices, cost of measures
Energy Wise for Your Business	Adjusted participation to achievable levels vs rapid assessment
Small Business Energy Solutions	Adjusted participation to achievable levels vs rapid assessment, implementation expenses and incentives increased to reflect market prices
Municipal LED Lighting	Phased out installation of LED streetlights after 2025

1

2 **Q. DO YOU AGREE THAT THE ACHIEVABLE POTENTIAL IS**  
3 **“PRINCIPALLY” BASED ON CURRENT DESC PERFORMANCE**  
4 **AND SPENDING IN THE LATEST EVALUATED PROGRAM YEAR**  
5 **AS WITNESS GREVATT CLAIMS?**

6 A. No. While Witness Grevatt’s references page 5 of the DSM Potential  
7 Study as using “current DESC performance and spending in the latest  
8 evaluated program year”, he inserts the word “principally” which ignores the

1 rest of the statement. The entire statement of the basis of the Medium  
2 Achievable scenario within the DSM Potential Study reads:

3 "Medium case achievable potential scenario based on  
4 current DESC performance and spending in the latest  
5 evaluated program year while accounting for influences  
6 outside of the utility's control (e.g., COVID-19  
7 disruptions) and continuing the existing DSM portfolio  
8 of programs and marketing plans with modifications to  
9 participation based on the ODC market study, utility  
10 benchmarking and the revised measures as identified in  
11 the 2023 Potential Study."

12 Witness Grevatt implies that the DSM Potential Study simply  
13 assumed the latest evaluated program years results would remain steady over  
14 the next 15 years, while this is not the case and is discussed in significant  
15 detail in the DSM Potential Study, in responses to CCL/SACE data requests,  
16 in my direct testimony, and further in this rebuttal testimony.

17 **Q. WERE THE COMMISSION REQUIRED SCENARIOS DEVELOPED**  
18 **"WITHOUT PROVIDING OPPORTUNITY FOR EE ADVISORY**  
19 **GROUP PARTICIPANTS TO PROVIDE INPUT TO THE**  
20 **PROCESS"?**

21 A. No. Witness Grevatt continues to state that advisory group members  
22 were not allowed to provide input into the process of the eventual

1 development of the Commission Required scenarios. However, before the  
2 development of the Commission Required scenarios, ICF completed the  
3 development of the Medium and Maximum Achievable scenarios based on  
4 an un-biased data analysis. All of the input during this development and the  
5 results of this analysis provide insight into whether or not the Commission  
6 Required Scenarios are “achievable.”

7 It seems that Witness Grevatt would have preferred the analysis to  
8 start from a point of view that assumed the highest Commission Required  
9 scenarios were in fact cost-effective, reasonable and achievable, which the  
10 analysis did not support, and then create subsets of this assumption for the  
11 other scenarios. This methodology would in fact inject substantial bias into  
12 the process, as opposed to a bottom-up analysis that factored in multiple data  
13 sources to allow the data to speak for itself.

14 **Q. WITNESS GREVATT MAKES THAT THE CLAIM THAT “THERE**  
15 **IS LITTLE EVIDENCE THAT DESC AND ICF RECOGNIZE THE**  
16 **LOAD MITIGATING BENEFITS OF ENERGY EFFICIENCY AND**  
17 **THE POTENTIAL FOR ITS DEPLOYMENT TO PROVIDE COST-**  
18 **EFFECTIVE BENEFITS FOR ITS CUSTOMERS. AS A RESULT, IT**  
19 **IS [WITNESS GREVATT’S] VIEW THAT DESC HAS FAILED TO**  
20 **FAIRLY EVALUATE A HIGH DSM CASE IN ITS 2023 IRP”. IS**  
21 **THIS TRUE?**

22 **A.** No. ICF is an experienced advisor and implementer of demand side

1 management programs nationally and as such performs potential studies,  
2 program planning, and implementation support. As I mentioned in my direct  
3 testimony, ICF currently implements more than 200 DSM and electrification  
4 programs for over 60 utilities in 26 states. ICF has also been the lead  
5 contractor for the Environmental Protection Agency's ("EPA") ENERGY  
6 STAR® program since its inception and also supports the U.S. Department  
7 of Energy's Better Buildings and Commercial Building Alliance programs.  
8 For Witness Grevatt to make this statement that intends to discredit ICF's  
9 capabilities and insight is not supportable.

10 Further, even if the statement were true, it lends nothing towards  
11 Witness Grevatt's conclusion that therefore a high DSM case was unfairly  
12 evaluated. As discussed in the DSM Potential Study, my direct testimony,  
13 responses to CCL/SACE data requests, and within this rebuttal testimony,  
14 ICF took an unbiased bottom-up approach using multiple data sources and  
15 input from the Energy Efficiency Advisory Group in order to allow the data  
16 to speak for itself when determining achievable scenarios.

17 **Q. IN CCL/SACE DATA REQUESTS AND IN WITNESS GREVATT'S**  
18 **TESTIMONY, MULTIPLE TIMES THERE IS THE ASSERTION**  
19 **THAT ICF BASED THE MAXIMUM ACHIEVABLE AND**  
20 **ACHIEVABLE POTENTIAL SOLELY ON "ICF PROGRAM DATA**  
21 **AND EXPERT JUDGEMENT" AND "HISTORICAL PROGRAM**  
22 **SAVINGS AND COST DATA." IS THIS THE CASE?**



1       A.               No. As is evident in Witness Grevatt's testimony and in CCL/SACE  
2       data requests, there continues to be a misunderstanding of how Table 2 of the  
3       DSM Potential Study should be read. I continue to believe that the table of  
4       data sources and their uses is intuitive, however this was also clarified within  
5       the responses to CCL/SACE data request #2 question 21 and data request #4  
6       question 10. I will attempt to clarify for Witness Grevatt again here.

7               Table 2 of the DSM Potential Study lists the "Data/Information  
8       Type", the "Source" of which it came from, and its "Primary Purpose of  
9       Study". Two (out of thirteen) of the "Data/Information Types" are listed as  
10      "ICF program data and expert judgement" and "Historical program savings  
11      (evaluation) and cost data". The two (out of 18+) "Sources" of this  
12      information are ICF and DESC. The "Primary Purpose of Study" of this data  
13      includes "Estimating achievable potential". Witness Grevatt seems to opine  
14      that the DSM Potential Study estimated the achievable scenarios simply on  
15      these two data sources, while ignoring the rest of the sources and information  
16      from Table 2. As discussed within the DSM Potential Study, my direct  
17      testimony, responses to CCL/SACE data requests, and in this rebuttal  
18      testimony, this is simply not the case. In fact, the development of the DSM  
19      Potential Study is an iterative, bottom-up, unbiased analysis that has steps  
20      building upon each other. All of the data sources listed in Table 2 play a role  
21      in estimating achievable potential.

1 **Q. WITNESS GREVATT ASSERTS THAT DESC DID NOT TAKE THE**  
2 **COMMISSION'S DIRECTIVE TO EVALUATE HIGHER EE**  
3 **SAVINGS LEVELS SERIOUSLY AND THAT "FROM THE OUTSET**  
4 **ICF AND DESC VIEWED THE SAVINGS LEVELS IN THE**  
5 **COMMISSION'S ORDER AS ONLY A HYPOTHETICAL**  
6 **EXERCISE." IS ANY OF THIS STATEMENT ACCURATE?**

7 A. No. In fact, this statement is not accurate. As discussed in the DSM  
8 Potential Study, my direct testimony, responses to CCL/SACE data requests,  
9 and in this rebuttal testimony, ICF took a iterative, bottom-up, unbiased  
10 approach to the scenario analysis. If ICF instead were to start with the  
11 assumption that the 2% Commission Required scenario was in fact cost-  
12 effective, reasonable and achievable, as Witness Grevatt seems to advocate  
13 for, this would introduce significant bias into the analysis and produce results  
14 that would not be based in data and analysis to back the eventual findings.

15 Further, as was discussed during the Energy Efficiency Advisory  
16 Group stakeholder meetings, DESC and ICF took all of the relevant  
17 Commission orders seriously. These are found in the table below:

<b>Electric DSM Docket 2021-34-E</b>  Order 2021-295	The company shall revisit the methodology used in establishing energy savings projections to ensure better alignment of
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	actual energy savings with projections the Company's future filings.
<b>IRP Docket 2019-226-E</b>  Order 2021-429- IRP	DESC is required to use "cost effective, reasonable and achievable" as the standard going forward for evaluating the potential for higher savings portfolios in future IRPs and updates beginning with the 2021 IRP update.
Order 2020-832	Complete a comprehensive evaluation of the cost-effectiveness and achievability of DSM portfolios ranging from 1% to 2% savings.

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2 **Q. DID ICF AND DESC CONSIDER THAT OTHER UTILITY EE**  
3 **PROGRAMS HAVE ACHIEVED HIGHER LEVELS OF SAVINGS**  
4 **THAN WHAT IS FORECASTED IN THE DSM POTENTIAL**  
5 **STUDY?**

6 A. Yes. Witness Grevatt makes the assertion that ICF did not consider  
7 that there are other utilities achieving higher levels of savings on a percentage  
8 of sales basis than DESC. However, in response to CCL/SACE Data Request  
9 #2, it was explained that as part of the benchmarking used for cost estimation  
10 of the Commission Required scenarios, 12 out of the 28 utilities used for

1 benchmarking achieved savings over 1%, which Witness Grevatt notes in his  
2 testimony. Specifically the response noted that while these utilities were  
3 considered, achieving these levels are dependent on several factors unique to  
4 their service territory and regulatory environment including ability to deliver  
5 residential lighting programs in a point of purchase/retail setting (which will  
6 decrease in the future), large behavioral programs, ability of large customers  
7 to opt-out of programs, reporting savings at a gross vs net level,  
8 establishment of the baseline of a sales number, accounting for savings  
9 achieved outside of the DSM program spend, “customer acceptance levels”,  
10 program maturity, and historical participation, etc. However, he continues  
11 to claim that ICF did not consider other utility higher savings programs and  
12 portfolios.

13 **Q. DID ICF “CHOSE AN OVERLY SIMPLISTIC APPROACH THAT**  
14 **FAILED TO CONSIDER HIGHER COST-EFFECTIVE LEVELS OF**  
15 **SAVINGS” IN THE COMMISSION REQUIRED SCENARIOS?**

16 A. No. As described in the question above, ICF did consider other  
17 utilities that achieve higher percent of sales savings in the Commission  
18 Required scenarios. As described in the DSM Potential Study, my direct  
19 testimony, responses to CCL/SACE data requests, and this rebuttal  
20 testimony, based on the findings of the analysis that produced the Maximum  
21 Achievable scenarios, the Commission Required Scenarios were therefore  
22 considered hypothetical because the Maximum Achievable scenario was

1 below these. However, in an effort to be compliant with Commission  
2 Directives, ICF scaled the program savings and produced costs in order to  
3 test the theoretical cost-effectiveness of these programs, even though they  
4 are not reasonable and realistically achievable.

5 **Q. DID DESC AND ICF PROPERLY PERFORM ANALYSIS OF THE**  
6 **HIGHER LEVEL OF SAVINGS SCENARIOS REQUIRED IN THE**  
7 **COMMISSIONS 2020 DIRECTIVE WITH A “PRECONCEPTION”**  
8 **THAT THESE SCENARIOS WERE UNREALISTIC?**

9 A. No. The assertion that ICF performed the analysis for the  
10 Commission Required scenarios with a “preconception” that they were  
11 unrealistic is categorically false. As discussed in the DSM Potential Study,  
12 my direct testimony, responses to CCL/SACE Data Requests, and in this  
13 rebuttal testimony, the DSM Potential Study was performed using a bottom-  
14 up approach and incorporating the best available data so as to not introduce  
15 any bias into the analysis. Conducting the analysis in any other manner, or  
16 in a back-of-the-envelope manner as Witness Grevatt has done in his  
17 testimony and attachments would introduce unneeded bias into the analysis.

18 **Q. DID DESC REACH A “FLAWED CONCLUSION” BY DISMISSING**  
19 **“OUT OF HAND” THE HIGHER LEVEL OF SAVINGS SHOWN IN**  
20 **THE COMMISSION REQUIRED SCENARIOS BECAUSE THEY**  
21 **ARE HIGHER THAN WHAT WAS IDENTIFIED AS**

1       **REALISTICALLY ACHIEVABLE AS WITNESS GREVATT**  
2       **CLAIMS?**

3       A.           No. In fact, it is the only conclusion that one could logically reach. If  
4       the realistically achievable Maximum Achievable scenario is lower than the  
5       Commission Required scenarios, it is not possible for the Commission  
6       Required scenarios to be realistically achievable.

7       **Q. IS IT “NOT CLEAR” WHY THE COMPANY MODELED THE TWO**  
8       **COMPONENTS OF HOME ENERGY CHECK UP SEPARATELY**  
9       **AND TOGETHER?**

10      A.           No. This topic was discussed many times during the Energy  
11      Efficiency Advisory Group meetings In the November 18th EEAG meeting,  
12      DESC explained to stakeholders that it will be difficult for the Tier 2  
13      component of the HEC program be a cost-effective stand alone. Based on the  
14      analysis conducted, the TRC of HEC Tier 1 on a standalone basis is 1.74,  
15      while the TRC for HEC Tier 2 is 0.54. The overall TRC of HEC is 0.84  
16      inclusive of both tiers. Analyzing the two components of the Home Energy  
17      Check-up separately for cost-effectiveness was performed, and presented to  
18      the Advisory Group, in an effort to provide transparent results and insight  
19      into what may be driving the combined program cost-effectiveness down,  
20      not only in the DSM Potential Study, but also in historical evaluations.  
21      Ultimately the DSM Potential Study provided results at the wholistic Home  
22      Energy Check-up Program level.

1 **Q. DID THE COMPANY ARBITRARILY LIMIT THE MEASURES IN**  
2 **ITS ANALYSIS AS WITNESS GREVATT STATES?**

3 A. No. In an effort to be as inclusive of measure opportunities as possible,  
4 one of the first steps in the potential study analysis was to provide a list of  
5 measures that were planned to be included in the modeling. It was requested  
6 multiple times that stakeholders provide any additional measures they would  
7 like considered, and other than any iterations or clarifications of measures  
8 already listed, no additional measures of material importance were provided.  
9 Specific responses to measures suggested are captured in the Advisory Group  
10 meeting notes and response. Further, measure characterization iterations  
11 were provided to stakeholders multiple times for review and modifications  
12 made to the measure characterizations based on that feedback. Additionally,  
13 Table 5 in the DSM Potential Study provides the number of measures  
14 analyzed, which included close to 2,000 measure permutations tested for  
15 cost-effectiveness.

16 **Q. IS THE PATHWAYS FOR ENERGY EFFICIENCY IN VIRGINIA**  
17 **(VA PATHWAYS), OF WHICH WITNESS GREVATT IS A**  
18 **PRIMARY AUTHOR, APPROPRIATE TO USE AS JUSTIFICATION**  
19 **FOR THE COMMISSION TO ORDER HIGHER LEVEL OF**  
20 **SAVINGS?**

21 A. No. There are several reasons the VA Pathways report, which Witness  
22 Grevatt provided, cannot be used as justification for the Commission to find

1 that higher level of savings are cost-effective, reasonable and achievable than  
2 what is identified in the Maximum Achievable scenario. Several of which I  
3 will discuss below.

4 1. There is no discussion of cost-effectiveness in the VA Pathways  
5 report. DESC is required to only include cost-effective,  
6 reasonable and achievable programs in the DSM Potential Study,  
7 which is exactly what occurred.

8 2. The benchmarked utilities appear to be cherry picked by Witness  
9 Grevatt and introduces significant bias. Further, only one (out of  
10 12) of these utilities could be considered "South Eastern".

11 3. The data does not provide an apples-to-apples comparison.

12 a. All of the data is from 2018. A year when programs which  
13 were able to claim significant savings from Residential  
14 Lighting point of sale programs did so. For approximately  
15 10 year DESC has not been able to offer a point of sale  
16 program because of the nature of the territory and leakage  
17 associated with non-DESC customers receiving rebates for  
18 the incentivized measures even though they are not  
19 assisting in subsidizing the programs.

20 b. Some of these utilities include savings that count towards  
21 their percentage of sales goals but are not funded by the  
22 DSM programs. For example, conservation voltage



1 reduction provided savings into the programs operated by  
2 Baltimore Gas & Electric (BG&E). This is not part of  
3 DESC's programs. This is not a criticism of programs  
4 operated in Maryland or by BG&E, but simply to note only  
5 one point of the flawed comparison being proposed.

6 c. In the report provided by Witness Grevatt it is not noted  
7 which, if any, of the utilities provided for benchmarking  
8 have an "opt-out" structure similar to that in which DESC  
9 operates its DSM programs under.

10 **Q. WITNESS GREVATT IMPLIES THAT CHANGES WERE MADE TO**  
11 **THE MEASURE CHARACTERIZATION THAT WERE INTENDED**  
12 **TO BE HIDDEN FROM THE STAKEHOLDER GROUP. IS THIS**  
13 **CORRECT?**

14 A. No. From one of the first Energy Efficiency Advisory Group  
15 meetings that "kicked off" the DSM Potential Study, ICF identified four  
16 objectives that would all be met "Using a Guiding Principle of Transparency  
17 and Inclusiveness". It is my opinion that this was accomplished as described  
18 in the DSM Potential Study, my direct testimony, responses to CCL/SACE  
19 data requests, and in this rebuttal testimony.

20 **Q. WOULD IT BE APPROPRIATE TO USE ANY OTHER DATA THAN**  
21 **THE MOST RECENT AND EVALUATED FOR MEASURE**  
22 **CHARACTERIZATION?**

1 A. No. Witness Grevatt makes the statement that; “It does not necessarily  
2 follow that the most recent evaluation data is always what will be most  
3 representative of future savings.” I would inherently agree with Witness  
4 Grevatt if the argument he is making is that no forecasting can ever be 100%  
5 accurate – in fact the only thing that is guaranteed is that there is no forecast  
6 that is 100% accurate, especially the longer term a forecast is. However,  
7 Witness Grevatt seems to be arguing that data, specifically measure  
8 characterization data, that is most recently evaluated should not be used  
9 simply because that data does not produce the result he likes. Arbitrability  
10 modifying measure characterization information based on the most recent  
11 data available introduces bias into a study that attempts to remove bias – both  
12 positive and negative.

13 **Q. ARE ICF’S ASSUMPTIONS ABOUT PROGRAM COSTS AND**  
14 **ACHIEVABLE LEVELS OF SAVINGS FLAWED, OVERLY**  
15 **CONSERVATIVE, AND NOT RESPONSIVE TO THE**  
16 **COMMISSION’S DIRECTIVE?**

17 A. No. As discussed in the DSM Potential Study, my direct testimony,  
18 response to CCL/SACE’s data requests, and my rebuttal testimony here ICF  
19 used a bottom-up, iterative, and unbiased approach to developing the  
20 potential scenarios. They are rooted in the most recent data available in order  
21 to provide the most up to date forecasts. They are in fact responsive to

1 multiple Commission's directives across two dockets which are provided in  
2 the table above.

3 **Q. WOULD IT BE APPROPRIATE TO SIMPLY USE PROGRAM**  
4 **SAVINGS LEVELS FROM THE COMMISSION REQUIRED**  
5 **SCENARIOS THAT ARE ESTIMATED TO BE COST-EFFECTIVE**  
6 **AS THE BEST METHOD FOR DETERMINING SAVINGS GOALS**  
7 **FOR DESC?**

8 A. No. This methodology, which appears to be an overly simplified  
9 version of what was used in the VA Pathways report, Witness Grevatt used  
10 for recommendations of savings goals is completely flawed. Witness Grevatt  
11 simply picks the highest savings from each of the programs that are identified  
12 as theoretically cost-effective in the Commission Required scenario  
13 analyses, and then adds them together to be his recommendation. As  
14 discussed in the DSM Potential Study, my direct testimony, responses to  
15 CCL/SACE data request, and in this rebuttal testimony, these Commission  
16 Required scenarios are considered hypothetical and theoretical. They are not  
17 suggested to be realistic or achievable in any manner, and cost-effectiveness  
18 estimation was only performed in order to be compliant with Commission  
19 directives. They should not be used for estimation or formulation for any  
20 kind of recommended savings targets.

21 **Q. DOES SIMPLY PERFORMING THE COST-EFFECTIVENESS**  
22 **ANALYSIS OF THE HIGHER SCENARIOS AND PROVIDING**

**RESULTS WITH A POSITIVE COST-EFFECTIVE SCORE “IN AND OF ITSELF SUGGEST THAT THEY ARE ACHIEVABLE?”**

A. No. Witness Grevatt continues to ignore that the reason the cost-effectiveness was developed for the Commission Required scenarios was to comply with the Commission directive for assessing the cost-effectiveness, reasonableness, and achievability of the Commission Required scenarios ranging from 1% to 2%. As was discussed in the DSM Potential Study, my direct testimony, responses to CCL/SACE Data Requests, and in this rebuttal testimony, “all these scenarios represent savings that are beyond the maximum (High) scenario results”.

**Q. WHY WOULD THE COMPANY DEVELOP COSTS FOR THE COMMISSION REQUIRED SCENARIOS IF THE COMPANY DID “NOT FEEL THEY ARE SUFFICIENT TO ACHIEVE THE HIGHER LEVEL OF SAVINGS”?**

A. As has been discussed in the DSM Potential Study, my direct testimony, responses to CCL/SACE data requests, and in this rebuttal testimony simply performing cost estimation of the Commission Required scenarios does not indicate that they are reasonable or achievable. Witness Grevatt comes to the conclusion in this testimony that the costs would not have been estimated for the Commission Required scenarios if ICF did not feel that were sufficient to achieve the higher level of savings. This conclusion is completely false and unsupported. The reason for making

1 assumptions around costs for the Commission Required scenarios was to  
2 comply with the Commission directive of assessing these scenarios for cost-  
3 effectiveness, reasonableness and achievability. This point has been  
4 communicated to stakeholders multiple times through the stakeholder  
5 meetings, the DSM Potential Study, my direct testimony, responses to  
6 CCL/SACE data requests, and this rebuttal testimony.

7 **Q. WITNESS GREVATT OPINES THAT THE “UPCOMING**  
8 **AVAILABILITY OF IRA REBATES AND TAX CREDITS IS YET**  
9 **ANOTHER REASON WHY THE COMMISSION SHOULD EXPECT**  
10 **DESC TO ACHIEVE HIGHER LEVELS OF SAVINGS THAN WHAT**  
11 **IT HAS PROPOSED, AND TO FURTHER CONCLUDE THAT [HIS]**  
12 **RECOMMENDED SAVINGS LEVELS ARE ‘ACHIEVABLE’.” IS**  
13 **THIS CORRECT?**

14 A. No. While there are estimates and schedules of the amount of funds  
15 that will be dedicated to South Carolina for IRA rebates, there is still no plan  
16 for the method or criteria of disbursement in the State including a timeline of  
17 when those funds would begin to be disbursed. As such it is inappropriate to  
18 make assumptions about such disbursement. Further, there is already a  
19 discussion amongst evaluators of attribution of the savings recognized from  
20 the IRA funds when they do become disbursed. Consider Witness Grevatt’s  
21 example of the \$2,000 tax credit going to a homeowner for purchase of a  
22 high efficiency heat pump. Let’s consider an extreme example of a utility

1 also providing a \$2,000 incentive for the same purchase. If simple attribution  
2 were to take place, both the tax credit and the utility's incentive payment  
3 would receive 50%. In short, the savings that the utility would be able to  
4 claim towards any goal achievement would only be 50% of what it was prior  
5 to the IRA funding.

6 The topic of IRA funding was discussed at multiple stakeholder  
7 meetings and as such, and in mind of the guiding principle in which the  
8 potential study was developed (transparency and inclusiveness), a discussion  
9 about IRA funding was included in the DSM Potential Study report. This  
10 narrative is provided below:

11 **A note about federal legislation:** While the Inflation  
12 Reduction Act (IRA) will lead to changes in some  
13 aspects of utility economics, it would not be pertinent to  
14 attempt to alter the results of this potential study based  
15 on speculation about those potential changes. As a  
16 practical matter, there is no industry standard  
17 percentage or consensus on how to apply any proposed  
18 IRA funding to a potential study that would fit the  
19 DESC requirements to meet compliance of Commission  
20 Order No. 2021-295. To comply with this Order, DESC  
21 informed the Commission they would ensure that any  
22 new measure and/or program and related forecasts are

1 supported by evaluated data or heavily supported by  
2 program experience in a similar service territory. While  
3 DESC may be able to take certain aspects of the IRA  
4 into account in its IRP, such as the potential for  
5 increased uptake in EVs as a result of IRA incentives, it  
6 is not practicable or appropriate to make similar  
7 assumptions as to the influence of DSM programs on  
8 the uptake of the measures contemplated in this  
9 potential study.

10 **Q. DOES THE DOE'S ENERGY EFFICIENCY POTENTIAL STUDIES**  
11 **CATALOG REFERENCED BY WITNESS GREVATT PROVIDE**  
12 **JUSTIFICATION FOR THE ASSERTION THE DSM POTENTIAL**  
13 **STUDY UNDERESTIMATED ACHIEVABLE POTENTIAL?**

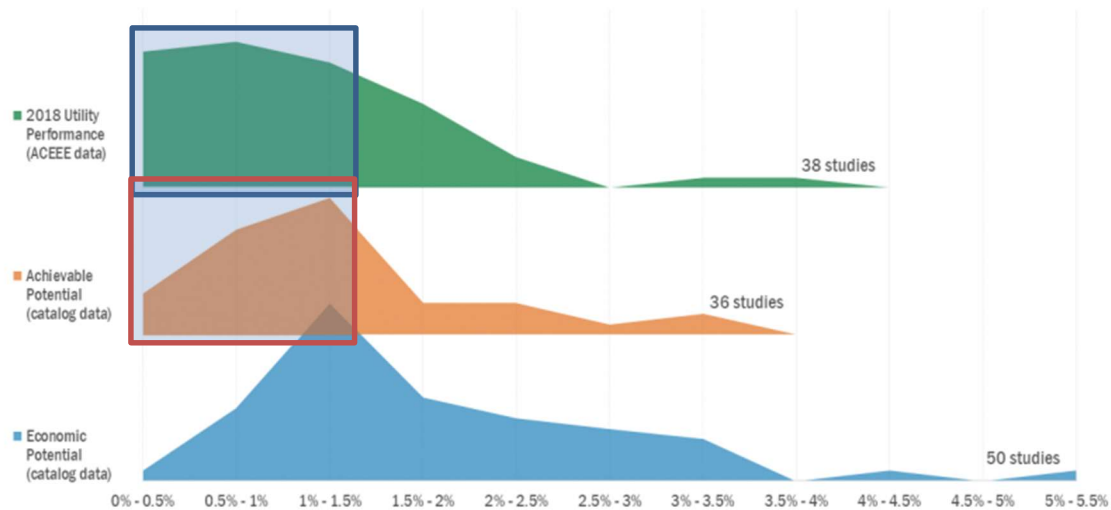
14 A. No. Witness Grevatt provides the DOE Energy Efficiency Potential  
15 Studies Catalog as a proving point in that other entities have compared  
16 achievable potential with actual program results, and in a direct attempt to  
17 discredit my assertion that it is not common to compare potential studies to  
18 actual program achievements. However, in my review I do not believe it  
19 does anything of the sort. It does not compare specific utility achievable  
20 studies to actual program achievement for any specific years. Instead, it  
21 provides results in aggregate from the 2018 ACEEE Utility Energy  
22 Efficiency Scorecard to Achievable and Economic potential studies

1 conducted at any time between 2005 and 2022. It provides no direct  
2 comparison of any one year of utility achievement to any one year of savings  
3 forecasted in an any one achievable study.

4 Further, while Witness Grevatt points out that while the text  
5 accompanying the graphics he has provided from the DOE EE Potential  
6 Studies Catalog states that utilities have “in some cases outperform[ed] the  
7 identified achievable potential”, in no way does it make the assertion that the  
8 majority, most or all of program achievements out perform the achievable  
9 potential study results. While there is no labeling of the y-axis in these  
10 graphics (provided below), one would be able to assume that it represents the  
11 number of utilities or studies that have shown the corresponding amount of  
12 achievement or potential on the x-axis as viewed as a percentage of sales. If  
13 one makes this assumption, the conclusion drawn would actually be that most  
14 utilities achieve savings levels lower than what is identified in achievable  
15 studies. I come to this conclusion simply based on the area under the curve  
16 from 0-1% on the 2018 ACEEE Utility Scorecard graphic (blue box below)  
17 compared to the area under the curve from 0-1% on the Achievable Potential  
18 graphic (red box below).



Most studies found **economic** and **achievable** electricity savings between 1.0% and 1.5%. Estimates of **2018 utility performance** shown for comparison.



1

2 **Q. ARE WITNESS GREVATT'S RECOMMENDATIONS FOR**  
 3 **REQUIRED SAVINGS LEVELS APPROPRIATE?**

4 A. No. As has been demonstrated in the DSM Potential Study, my direct  
 5 testimony, responses to CCL/SACE data requests, and my rebuttal testimony  
 6 here, the methodology and assumptions in which Witness Grevatt uses to  
 7 develop his recommended savings level are flawed and biased at best,  
 8 especially at the level he recommends which assumes DSM results at a level  
 9 many times higher than the DSM Potential Study analysis shows based on  
 10 an bottom-up, iterative, and unbiased approach.

11 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

12 A. Yes. This concludes my rebuttal testimony.

13